

# **House of Representatives**

# File No. 776

# General Assembly

January Session, 2021

(Reprint of File No. 550)

Substitute House Bill No. 6646 As Amended by House Amendment Schedule "A"

Approved by the Legislative Commissioner June 1, 2021

### AN ACT CONCERNING CRUMBLING CONCRETE FOUNDATIONS.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

- Section 1. Section 29-265d of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):
  - (a) Any owner of a residential building who has obtained a written evaluation from a professional engineer licensed pursuant to chapter 391 indicating that the foundation of such residential building was made with defective concrete may provide a copy of such evaluation to the assessor and request a reassessment of the residential building by the assessor. Not later than ninety days after receipt of a copy of such evaluation, or prior to the commencement of the assessment year next following, whichever is earlier, the assessor, member of the assessor's staff or person designated by the assessor shall inspect the residential building and adjust its assessment to reflect its current value. Such reassessment may be appealed pursuant to section 12-111. Any reassessment under this section shall apply [for five assessment years,

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15 notwithstanding the provisions of section 12-62.] until the next

- 16 <u>revaluation becomes effective or the concrete foundation is repaired or</u>
- 17 replaced, and the assessor, member of the assessor's staff or person
- designated by the assessor adjusts the assessment of the residential
- 19 <u>building</u>, whichever is earlier.
- 20 (b) Notwithstanding the provisions of section 12-62, any property
- 21 that has had its assessment adjusted pursuant to subsection (a) of this
- 22 <u>section shall be assessed during each revaluation cycle to reflect its</u>
- 23 <u>current value.</u>
- [(b)] (c) An owner of a residential building that has obtained a
- 25 reassessment pursuant to this section shall notify the assessor if the
- 26 concrete foundation is repaired or replaced. [during the five assessment
- years for which the reassessment is effective.] Such notification shall be
- 28 made in writing within thirty days of the repair or replacement of the
- 29 concrete foundation. Not later than ninety days after receipt of such
- 30 notification, or prior to the commencement of the assessment year next
- 31 following, whichever is earlier, the assessor, member of the assessor's
- 32 staff or person designated by the assessor shall inspect the residential
- 33 building and adjust its assessment to reflect its current value.
- Sec. 2. Subdivision (2) of subsection (b) of section 38a-91vv of the
- 35 general statutes is repealed and the following is substituted in lieu
- 36 thereof (*Effective July 1, 2021*):
- 37 (2) Establish a board of directors who shall serve in a volunteer
- 38 capacity. The membership of the board of directors shall include, but
- 39 need not be limited to, a real estate agent or broker, two owners of
- 40 residential buildings who have concrete foundations that have
- 41 deteriorated due to the presence of pyrrhotite, a chief executive or such
- 42 chief executive's designee of a municipality in which residential
- 43 buildings with concrete foundations that have deteriorated due to the
- 44 presence of pyrrhotite are located, an individual with professional
- 45 investment experience and currently registered as an investment
- 46 adviser pursuant to title 36b, the executive directors of the Capitol

47 Region Council of Governments and the Northeastern Connecticut 48 Council of Governments or such executive directors' designees and 49 representatives from the insurance and banking industries, who shall 50 not have professional relationships with any bank or insurance 51 company that has a financial interest in residential buildings subject to 52 the provisions of this section and sections 7-374b, 8-441, 8-442, 8-443, 8-53 444, subparagraph (B) of subdivision (20) of subsection (a) of section 12-54 701 and section 29-265f. The speaker, the minority leader of the House 55 of Representatives, the president pro tempore of the Senate and the 56 Senate Republican president pro tempore shall each appoint a member 57 of the General Assembly as a nonvoting, ex-officio member of the board 58 of directors. The Governor shall appoint two members to the board of 59 directors, one of whom shall be appointed as a nonvoting, ex-officio member. It shall not constitute a conflict of interest for a member of the 60 61 board of directors, who is the owner of a residential building which has 62 a concrete foundation that has deteriorated due to the presence of 63 pyrrhotite, or the spouse or dependent child of such member, to apply 64 for or receive assistance from the captive insurance company 65 established under this section, to repair or replace such concrete 66 foundation, provided such member shall abstain from deliberation, 67 action or vote by the board of directors in specific respect to such 68 member's application or the application of such spouse or dependent 69 child;

- Sec. 3. Subsection (i) of section 38a-91vv of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1*, 2021):
- (i) The captive insurance company shall continue [until June 30, 2022, or] until its existence is terminated by law. Upon the termination of the existence of the company, all its right and properties shall pass to and be vested in the state of Connecticut.
- Sec. 4. (*Effective July 1, 2021*) Not later than January 1, 2023, the captive insurance company established pursuant to section 38a-91vv of the general statutes, as amended by this act, shall submit a report, in

accordance with the provisions of section 11-4a of the general statutes, to the joint standing committees of the General Assembly having cognizance of matters relating to insurance and planning and development. Such report shall include, but not be limited to, an analysis of the extent of the damage caused to concrete foundations in nonresidential buildings in the state due to the presence of pyrrhotite in such concrete.

- Sec. 5. Section 8-446 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2021*):
- (a) There is established an account to be known as the "Healthy Homes Fund" which shall be a separate, nonlapsing account within the General Fund. The account shall contain any moneys required by law to be deposited in the account. Moneys in the account shall be expended by the Department of Housing for the purposes of:

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- (1) Funding of not more than one million dollars, from remittances transferred pursuant to section 38a-331 for the period beginning January 1, 2019, and ending December 31, 2019, shall be remitted to the Department of Economic and Community Development to be used for grants-in-aid to homeowners with homes located in the immediate vicinity of the West River in the Westville section of New Haven and Woodbridge for structurally damaged homes due to subsidence and to homeowners with homes abutting the Yale Golf Course in the Westville section of New Haven for damage to such homes from water infiltration or structural damage due to subsidence; [and]
- (2) Funding a program, and any related administrative expense, to reduce health and safety hazards in residential dwellings in Connecticut, including, but not limited to, lead, radon and other contaminants or conditions, through removal, remediation, abatement and other appropriate methods. For purposes of this subdivision, "administrative expense" means any administrative or other cost or expense incurred by the Department of Housing in carrying out the provisions of this section, including, but not limited to, the hiring of

112 necessary employees and entering into necessary contracts; and

(3) Funding of not more than one hundred seventy-five thousand dollars, from remittances transferred pursuant to section 38a-331 for the period beginning January 1, 2021, and ending December 31, 2021, shall be remitted to the captive insurance company established pursuant to section 38a-91vv, as amended by this act, to be used for the research and development of the report described in section 4 of this act and any related administrative expense. Such sum shall not be considered in calculating the total funds allocated or made available to the captive insurance company used for administrative or operational costs pursuant to section 38a-91vv, as amended by this act.

- (b) The Department of Housing shall notify the Department of Public Health not later than thirty days after the deposit of remittances in the Healthy Homes Fund pursuant to subdivision (2) of subsection (c) of section 38a-331. Not later than thirty days after the deposit of remittances pursuant to subdivision (2) of subsection (c) of section 38a-331, the Department of Public Health shall notify each municipal health department in the state annually regarding funds available pursuant to the Healthy Homes Fund established pursuant to subsection (a) of this section.
- (c) Not later than January 1, 2020, and annually thereafter, the Commissioner of Housing shall report to the joint standing committees of the General Assembly having cognizance of matters relating to housing, planning and development and appropriations and the budgets of state agencies, in accordance with section 11-4a, regarding the status of the Healthy Homes Fund established pursuant to this section and all moneys deposited into and expended by the Department of Housing pursuant to said account. Any such report may be submitted electronically.
- Sec. 6. Subdivision (28) of subsection (b) of section 1-210 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2021*):

144 (28) Any [documentation provided to or obtained] <u>records</u> 145 maintained or kept on file by an executive branch agency or public 146 institution of higher education, including documentation [provided] 147 prepared or obtained prior to May 25, 2016, relating to claims of or 148 testing for faulty or failing concrete foundations in residential buildings 149 [by the owners of such residential buildings,] and documents or 150 materials prepared by an executive branch agency or public institution 151 of higher education relating to such [documentation, for seven years 152 after the date of receipt of the documentation or seven years after May 153 25, 2016, whichever is later records.

- Sec. 7. Section 29-265e of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2021*):
- 156 Any documentation provided to or obtained by an executive branch 157 agency, including documentation provided or obtained prior to May 25, 158 2016, relating to claims of faulty or failing concrete foundations in 159 residential buildings by the owners of such residential buildings, and 160 documents prepared by an executive branch agency relating to such 161 documentation, shall be maintained as confidential by such agency. [for 162 not less than seven years after the date of receipt of the documentation or seven years after May 25, 2016, whichever is later.] 163
- Sec. 8. (NEW) (*Effective July 1, 2021*) (a) For the purposes of this section, "qualified geologist" means a geologist certified by the American Institute of Professional Geologists, licensed by the National Association of State Boards of Geology or certified or licensed by another organization deemed suitable by the State Geologist.

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(b) (1) Not later than January 1, 2022, the operator of any quarry established on or before July 1, 2021, that produces aggregate for use in concrete intended for use or sale shall prepare a geological source report and provide such report to the State Geologist and Commissioner of Energy and Environmental Protection. Such report shall be prepared in a form and manner prescribed by the commissioner, and shall include, but need not be limited to, (A) the mining, processing, storage and

176 quality control methods utilized by such operator, (B) a description of 177 the characteristics of the aggregate to be excavated at such quarry, 178 which shall be prepared by a qualified geologist, (C) a description of the 179 products to be produced by such quarry, (D) a copy of the results of an 180 inspection of face material and geologic log analysis completed by a 181 qualified geologist, and (E) analyses of core samples, completed by a 182 qualified geologist, unless such quarry is active and has a satisfactory 183 performance history as determined by the commissioner. Not later than 184 January 1, 2026, and every four years thereafter, such operator shall 185 update such report and provide such updated report to the State 186 Geologist and commissioner.

(2) The operator of any quarry established after July 1, 2021, that intends to produce aggregate for use in concrete intended for use or sale shall prepare a geological source report, described in subdivision (1) of this subsection, and provide such report to the State Geologist and commissioner prior to offering such aggregate for use or sale. Such operator shall update such report every four years thereafter and provide such updated report to the State Geologist and commissioner.

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- 194 (3) Not later than January 1, 2022, and annually thereafter, the 195 operator of each quarry that produces aggregate for use in concrete 196 intended for use or sale shall provide such quarry's operations plan to 197 the State Geologist and commissioner.
  - Sec. 9. (NEW) (Effective July 1, 2021) (a) Except as provided in subsection (c) of this section, not later than July 1, 2022, and not less than annually thereafter, the operator of each quarry that sells or provides aggregate intended for use in concrete, shall submit a written report to the Commissioner of Energy and Environmental Protection and the State Geologist, containing the results of a third-party test of the sulfur content of such aggregate. Such test shall be conducted by a third-party certified or accredited to conduct testing in accordance with American Society for Testing Materials standard C33/C33M, Standard Specification Concrete Aggregates. Such certification for accreditation shall be provided by the International Organization for

209 Standardization, United States Army Corps of Engineers, American

- 210 Association of State Highway and Transportation Officials,
- 211 International Accreditation Service or a similar organization.
- (b) Each test conducted pursuant to subsection (a) of this section shall include:
- 214 (1) The performance of a rapid total sulfur test on a ten-pound sample
- of aggregate by any of the following means: (A) X-ray fluorescence
- analysis, (B) purge and trap gas chromatography analysis, (C) analysis
- 217 by combustion furnace, or (D) other technology deemed at least as
- 218 accurate by the State Geologist. Representative samples shall be
- 219 collected and managed in accordance with American Society for Testing
- 220 and Materials standard D75/D75M, Standard Practice for Sampling
- 221 Aggregates, reduced to a size appropriate for laboratory testing and
- 222 pulverized for analysis;
- 223 (2) If the total sulfur content of the sample in per cent by mass is less
- 224 than one per cent and equal to or greater than one-tenth per cent, the
- 225 performance of x-ray diffraction, magnetic susceptibility or
- 226 petrographic analyses to determine the presence and relative
- abundance of pyrrhotite in the sample; and
- 228 (3) If the results of the test conducted pursuant to this section reveal
- 229 that pyrrhotite is present in the sample, a petrographic analysis based
- 230 on American Society for Testing and Materials standards C295,
- 231 Standard Guide for Petrographic Examination of Aggregates for
- 232 Concrete, and C294, Standard Descriptive Nomenclature for
- 233 Constituents of Concrete Aggregates, shall be conducted to determine
- the acceptance and use of the aggregate.
- 235 (c) If the results of the test conducted pursuant to this section reveal
- 236 that the total sulfur content of the sample in per cent by mass is less than
- one-tenth per cent, an operator may sell or provide such aggregate for
- use in concrete for a period of four years beginning on the date of receipt
- of such test results and shall not be required to submit a report pursuant
- 240 to subsection (a) of this section during such period.

(d) If the results of the test conducted pursuant to this section reveal that the total sulfur content of the sample in per cent by mass is equal to or greater than one per cent, an operator shall not sell or provide such aggregate for use in concrete.

- (e) If the results of the test performed pursuant to this section reveal that the total sulfur content of the sample in per cent by mass is less than one per cent and equal to or greater than one-tenth per cent and (1) no pyrrhotite is present, an operator may sell or provide such aggregate for use in concrete for a period of one year beginning on the date of receipt of such test results; and (2) pyrrhotite is present, an operator shall not sell or provide such aggregate in a manner inconsistent with the acceptance and use indicated by the results of a petrographic analysis undertaken pursuant to this section or requirement or restriction established by the Commissioner of Energy and Environmental Protection pursuant to subsection (f) of this section.
- (f) The Commissioner of Energy and Environmental Protection, in consultation with the State Geologist, may, if the results of the test performed pursuant to this section reveal that the total sulfur content of the sample in per cent by mass is less than one per cent and equal to or greater than one-tenth per cent and pyrrhotite is present, (1) require the operator of the quarry to conduct additional testing, including but not limited to a mortar bar expansion test pursuant to American Society for Testing and Materials standard C1293, Standard Test Method for Determination of Length Change of Concrete Due to Alkali-Silica Reaction, or C227, Standard Test Method for Potential Alkali Reactivity of Cement-Aggregate Combinations; and (2) implement restrictions on the sale or use of aggregate from such quarry in concrete.
- (g) The Commissioner of Energy and Environmental Protection may adopt regulations, in accordance with chapter 54 of the general statutes, to implement the provisions of this section. Such regulations shall include, but not be limited to, definitions for the terms "rapid total sulfur test", "x-ray fluorescence analysis", "purge and trap gas chromatography analysis", "analysis by combustion furnace", "x-ray diffraction",

"magnetic susceptibility analysis", "petrographic analysis" and "mortarbar expansion test".

This act shall take effect as follows and shall amend the following sections:					
Section 1	from passage	29-265d			
Sec. 2	July 1, 2021	38a-91vv(b)(2)			
Sec. 3	July 1, 2021	38a-91vv(i)			
Sec. 4	July 1, 2021	New section			
Sec. 5	July 1, 2021	8-446			
Sec. 6	July 1, 2021	1-210(b)(28)			
Sec. 7	July 1, 2021	29-265e			
Sec. 8	July 1, 2021	New section			
Sec. 9	July 1, 2021	New section			

The following Fiscal Impact Statement and Bill Analysis are prepared for the benefit of the members of the General Assembly, solely for purposes of information, summarization and explanation and do not represent the intent of the General Assembly or either chamber thereof for any purpose. In general, fiscal impacts are based upon a variety of informational sources, including the analyst's professional knowledge. Whenever applicable, agency data is consulted as part of the analysis, however final products do not necessarily reflect an assessment from any specific department.

#### **OFA Fiscal Note**

## State Impact:

Agency Affected	Fund-Effect	FY 22 \$	FY 23 \$
Department of Housing	HHF - Cost	175,000	None
Note: HHP=Healthy Homes Fund			

## Municipal Impact:

Municipalities	Effect	FY 22 \$	FY 23 \$	
Various	Potential	None	None	See Below
Municipalities	Revenue			
	Gain			
Various	Precludes	None	None	See Below
Municipalities	Revenue			
	Gain			

### Explanation

The bill makes various changes related to the issue of crumbling concrete foundations that result in the fiscal impacts described below.

**Section 1** prevents municipalities, once they have adjusted the assessment of a home with a defective concrete foundation, from reassessing that home until the foundation has been repaired or replaced. This precludes any revenue gain a municipality might experience if it chose to increase the assessment of a home with a defective concrete foundation prior to such foundation being repaired.

The bill also results in a revenue gain to municipalities associated with homeowners impacted by crumbling foundations to the extent that it allows more homeowners to have their foundations remediated. Under current law, as of September 2020, at least 845 properties in at least 10 communities have had their assessments reduced due to

foundation problems. This has resulted in an estimated revenue loss to those municipalities of about \$2.7 million cumulatively. The bill results in a revenue gain that would vary based on the assessments of such properties after foundation remediation. It is unknown how much of this revenue gain would occur in FY 23 and how much would occur in the out years.

**Section 3** eliminates the June 30, 2022 sunset date for the captive insurer, Connecticut Foundations Solutions Indemnity Company Inc. (CFSIC), which allows the captive to continue operating using state funding already authorized for that purpose.<sup>1</sup> As the captive spends approximately \$800,000 of its revenue annually on operating expenses, under the bill that operating cost is anticipated to continue in FY 23 and future years.<sup>2</sup>

**Sections 4 and 5** result in a one-time cost to the Healthy Homes Fund of up to \$175,000 in FY 22 to provide funding for CFSIC to research and report on the extent of crumbling foundations in nonresidential buildings. This will result in less funding being available for the lead removal, remediation and abatement program under the Department of Housing (DOH) that is funded from the same account.

**Sections 8 and 9** require specified geological reports and quarry operational plans, to be submitted to the State Geologist and the Department of Energy and Environmental Protection (DEEP). The bill also allows DEEP to establish regulations under certain conditions. These provisions are not anticipated to result in a fiscal impact.

The bill also makes other minor changes that have no fiscal impact.

<sup>&</sup>lt;sup>1</sup> CFSIC distributes financial assistance to homeowners with foundations crumbling due to the presence of pyrrhotite using state funds deposited in the Crumbling Foundations Assistance Fund. The state has authorized \$100 million in bond funds and about 85 percent of the revenue from a \$12 annual surcharge on homeowners' insurance policies (in place through 2029) to provide such assistance.

<sup>&</sup>lt;sup>2</sup> Under current law, the captive or its successor is expected to continue minimal operations for up to 36 months after sunset to run off accumulated liabilities, so not all FY 23 operating expenses under the bill are additional.

House "A" strikes the underlying bill and its associated fiscal impact and results in the fiscal impact described above.

### The Out Years

The municipal impacts identified above would continue into the future subject to the timing and value of homes being remediated and reassessed and to the number of additional home foundations remediated as a result of the bill.

Sources: Connecticut Foundation Solutions Indemnity Company, Inc. 2019 and 2020 Audited Financial Statements

# OLR Bill Analysis sHB 6646 (as amended by House "A")\*

### AN ACT CONCERNING CRUMBLING CONCRETE FOUNDATIONS.

#### SUMMARY

This bill makes various changes in state law concerning "crumbling foundations." (Generally, this means concrete foundations that are failing or deteriorating due to the presence of pyrrhotite.)

It makes the Connecticut Foundation Solutions Indemnity Company (CFSIC) permanent by eliminating the current June 30, 2022, termination date and adds two gubernatorial appointees to its board of directors (§§ 2 & 3). The bill also requires CFSIC to study the extent of pyrrhotite-related foundation damage in nonresidential buildings and remits up to \$175,000 from the Healthy Homes Fund for the study's expenses (§§ 4 & 5). CFSIC is the captive insurance company created by law to distribute money to homeowners with concrete foundations that are deteriorating due to the presence of pyrrhotite.

The bill requires concrete aggregate quarry operators to test and report on their aggregate's total sulfur content ("total S"). It imposes restrictions on the use of aggregate that has a relatively high total S and, in certain circumstances, requires additional testing to identify the presence of pyrrhotite. The bill authorizes the Department of Energy and Environmental Protection (DEEP) commissioner to adopt regulations on aggregate testing and impose restrictions on aggregate that contains pyrrhotite (§ 9).

The bill also:

1. eliminates the five-year cap on reduced assessments for properties made with defective concrete (§ 1) and

2. requires Connecticut concrete aggregate quarries to (1) submit an operations plan to the state geologist and DEEP commissioner annually and (2) prepare a geological source report (GSR) every four years and submit it to the same entities (§ 8).

Additionally, the bill permanently exempts certain executive branch agency records related to faulty or failing concrete foundations in residential buildings from disclosure under the Freedom of Information Act (FOIA) and applies the exemption to the same types of records held by public higher education institutions (§ 6). The bill requires executive branch agencies to keep information about claims of faulty or failing foundations confidential in perpetuity (§ 7).

\*House Amendment "A": (1) eliminates provisions allowing the Connecticut Housing Finance Authority to make loans to CFSIC and issue up to \$100 million in revenue bonds; (2) adds gubernatorial appointees to CFSIC's board of directors (§ 2); (3) clarifies the reassessment provision requires properties with adjusted assessments to be revalued during normal cycles(§ 1); (4) adds the FOIA and confidentiality provisions (§§ 6 & 7); (5) modifies the GSR provision and makes the submission of an operations plan an annual requirement (§ 8); (6) eliminates the provision in the underlying bill requiring the Department of Consumer Protection commissioner to adopt regulations establishing standards for aggregate testing and replaces them with requirements for annual aggregate testing and authorization for DEEP to adopt regulations (§ 9); and (7) makes minor changes.

EFFECTIVE DATE: July 1, 2021, except the provision on assessments (§ 1) is effective upon passage.

# § 1 — REDUCED ASSESSMENT FOR PROPERTIES WITH DEFECTIVE FOUNDATIONS

By law, municipal assessors or their staff must inspect and reassess residential properties with foundations made from defective concrete at the property owner's request. Under current law, the adjusted assessment must reflect the property's current value and is valid for five

assessment years unless the foundation is repaired or replaced sooner. The bill eliminates the five-year maximum, thus allowing property owners to benefit from a reduced assessment until their foundation is repaired or replaced. The property's assessment must be updated with each revaluation and reflect any diminished value.

## § 2 — CFSIC BOARD OF DIRECTORS

The bill requires the governor to appoint two members to CFSIC's volunteer board of directors, one of whom must be a nonvoting, exofficio member. By law, CFSIC's board of directors includes four legislatively appointed non-voting ex-officio members, as well as several members with experience related to various aspects of crumbling concrete foundations, including a real estate broker or agent; a municipal chief executive; insurance and banking industry representatives; and the executive directors of the Capitol Region and Northeastern Councils of Governments.

# §§ 4 & 5 — STUDY OF NONRESIDENTIAL CRUMBLING CONCRETE DAMAGE

By January 1, 2023, the bill requires CFSIC to submit a report to the Insurance and Real Estate and Planning and Development committees analyzing the extent of pyrrhotite-related concrete foundation damage in nonresidential buildings.

The bill also requires the Department of Housing to remit up to \$175,000 from surcharge remittances transferred to the Healthy Homes Fund during the 2021 calendar year to CFSIC for research, development, and administrative expenses related to the report described above. (The Healthy Homes Fund includes revenue from an annual \$12 surcharge that existing law imposes on the named insured under certain homeowners insurance policies.)

However, the bill specifies that this amount must not be used in calculating the total funds allocated or made available to CFSIC for administrative or operational expenses. (By law, CFSIC may not spend more than 10% of its annual allocations on administrative or operational

costs (CGS § 38a-91vv(c)).)

## § 6 — DISCLOSURE UNDER FOIA

Current law exempts from disclosure (1) documents executive branch agencies have on claims of faulty or failing concrete foundations in residential buildings by the buildings' owners and (2) associated agency-prepared documents. Currently, the disclosure protection lasts until the later of May 25, 2023, or seven years after the agency receives the documents. The bill makes the disclosure exemption permanent.

The bill also makes minor changes that specify which records are covered. Under the bill, the executive branch agency protection applies to (1) any records the agencies maintain or keep on file related to claims of or testing for faulty or failing residential concrete foundations, rather than only those related to owners' claims, and (2) both documents and materials the agencies prepare related to the records.

Lastly, the bill extends disclosure protection to records public higher education institutions maintain or keep on file, or documents or materials the institutions prepare, concerning claims of and testing for faulty or failing concrete foundations.

## § 7 — CONFIDENTIALLY OF INFORMATION

Current law generally requires executive branch agencies to keep documentation they receive or obtain related to owners' claims of faulty or failing residential concrete foundations and related agency-prepared materials confidential for at least seven years from the date of receipt. The bill eliminates the seven-year cap, thus requiring this information to be kept confidential permanently.

# § 8 — GSR AND OPERATIONS PLAN REQUIREMENT GSR

By January 1, 2022, the bill requires the operator of each Connecticut quarry established on or before July 1, 2021, that produces concrete aggregate to prepare a geological source report (GSR) and submit it to the state geologist and DEEP commissioner. Similarly, before using or

selling concrete aggregate, the operator of a new quarry must prepare and submit a GSR.

Under the bill, each concrete aggregate quarry must update and submit its GSR quadrennially.

## **GSR Requirements**

The GSR must be prepared as the commissioner requires and must include:

- a description of the operator's mining, processing, storage, and quality control methods;
- 2. a description of the products the quarry will produce;
- 3. a description of the characteristics of the aggregate to be excavated, prepared by a qualified geologist;
- 4. the results of an inspection of face material and geologic log analysis, completed by a qualified geologist; and
- 5. core sample analyses completed by a qualified geologist unless the quarry is active and the commissioner determines the quarry's performance history is satisfactory.

A "qualified geologist" is a geologist certified by the American Institute of Professional Geologists, licensed by the National Association of State Boards of Geology, or certified or licensed by another organization deemed suitable by the state geologist.

# **Operations Plan**

By January 1, 2022, and annually thereafter, the bill requires concrete aggregate quarry operators to provide the quarry's operations plan to the state geologist and DEEP commissioner.

## § 9 — ANNUAL AGGREGATE TESTING

Beginning July 1, 2022, and at least annually thereafter, the operator of each quarry that sells or provides aggregate intended for use in

concrete, must provide a written report to the DEEP commissioner and the state geologist, containing the results of a third-party test of the aggregate's sulfur content (total S) and further testing for pyrrhotite, if applicable. The bill exempts quarry operators from the annual requirement if tests show their aggregate has a low total S. (If aggregate has a high total S concentration, it is not suitable for structural concrete. Measuring aggregate's total S enables one to develop a conservative estimate of the maximum pyrrhotite concentration. (Many minerals other than pyrrhotite contain sulfur.))

Under the bill, the test must be conducted by a third-party certified or accredited to conduct testing in accordance with American Society for Testing Materials standard C33/C33M, Standard Specification for Concrete Aggregates. The certification or accreditation must be provided by the International Organization for Standardization, United States Army Corps of Engineers, American Association of State Highway and Transportation Officials, International Accreditation Service, or a similar organization.

The bill authorizes the DEEP commissioner to adopt regulations to implement the bill's aggregate testing provisions. If adopted, the regulations must include definitions for the following terms: "rapid total sulfur test," "x-ray fluorescence analysis," "purge and trap gas chromatography analysis," "analysis by combustion furnace," "x-ray diffraction," "magnetic susceptibility analysis," "petrographic analysis," and "mortar bar expansion test."

#### Total S Test

Each test must include the performance of a rapid total S test on a 10-pound aggregate sample using one of the following methods:

- 1. x-ray fluorescence analysis,
- 2. purge and trap gas chromatography analysis,
- 3. analysis by combustion furnace, or

4. other technology deemed at least as accurate by the state geologist.

The bill specifies that representative samples must be (1) collected and managed in accordance with American Society for Testing and Materials standard D75/D75M, Standard Practice for Sampling Aggregates, and (2) reduced to a size appropriate for laboratory testing and pulverized for analysis.

**Results.** If testing shows the sample's total S by mass is more than 1%, the operator cannot sell or otherwise provide the aggregate for use in concrete.

If testing shows the sample's total S by mass is less than 0.1%, a quarry operator (1) may sell or provide such aggregate for use in concrete four years, beginning on the date of receipt of such test results; and (2) does not need to submit test results to the DEEP commissioner and state geologist during that period.

If testing shows the sample's total S falls in between these thresholds, then further testing is required.

# Further Testing for Pyrrhotite

**Required Testing**. If the total S of the sample is 0.1% or more, but less than 1% (by mass), then the sample must be further tested for the presence and relative abundance (concentration) of pyrrhotite using one of the following methods: (1) x-ray diffraction, (2) magnetic susceptibility, or (3) another type of petrographic analysis.

If the sample contains pyrrhotite, a petrographic analysis must be conducted to determine whether the aggregate can be used. The analysis must be based on (1) American Society for Testing and Materials standards C295, Standard Guide for Petrographic Examination of Aggregates for Concrete, and (2) C294, Standard Descriptive Nomenclature for Constituents of Concrete Aggregates.

Additional Testing and Restrictions. If testing shows that

pyrrhotite is present and the total S by mass is 0.1% or more but less than 1%, then DEEP's commissioner, in consultation with the state geologist, may do the following:

- require the quarry operator to conduct additional testing, including a mortar bar expansion test pursuant to American Society for Testing and Materials standard C1293, Standard Test Method for Determination of Length Change of Concrete Due to Alkali-Silica Reaction, or C227, Standard Test Method for Potential Alkali Reactivity of Cement-Aggregate Combinations; and
- 2. impose restrictions on selling or using the aggregate for concrete.

### **BACKGROUND**

### Related Bill

HB 6236 (File 337), favorably reported by the Higher Education and Employment Advancement Committee, contains substantially similar FOIA provisions, but it does not eliminate the seven-year retention provision.

### **COMMITTEE ACTION**

Planning and Development Committee

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Joint Favorable Substitute
Yea 26 Nay 0 (03/31/2021)
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